



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,682	08/02/2001	Lands J. Stewart JR.		5757

24919 7590 06/18/2004

MCAFFEE & TAFT
TENTH FLOOR, TWO LEADERSHIP SQUARE
211 NORTH ROBINSON
OKLAHOMA CITY, OK 73102

EXAMINER

KYLE, MICHAEL J

ART UNIT	PAPER NUMBER
----------	--------------

3676

DATE MAILED: 06/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/920,682

Applicant(s)

STEWART, LANDS J.

Examiner

Michael J Kyle

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6, 9-19, 22-30 and 32-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-11, 22, 23, 32, 33 and 35-39 is/are allowed.
- 6) ☒ Claim(s) 1-3, 12, 14-16, 24, 26, 27 and 34 is/are rejected.
- 7) ☒ Claim(s) 4-6, 13, 17-19, 25 and 28-30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 14-16, 26, and 27 are rejected under 35 U.S.C. 102(b) as being anticipated by McKee (U.S. Patent No. 3,376,084). McKee discloses a seal for use adjacent to a rotating surface (12) comprising a ring (56) having a sealing surface (68) sealing between a portion of the stationary surface (48) and the sealing surface. The ring (56) is spaced from the rotating surface and has a race engagement surface (72) separate from the sealing surface. McKee also discloses a first race (16), a second race (38 or 40), and a plurality of bearing elements (34). While McKee describes features 56 and 58 as being cushioning elements, examiner notes this structure inherently provides a sealing function. For this reason, examiner considers 56 and 58 to be seals.

3. With respect to claims 2 and 3, McKee discloses a bearing cage (36) disposed between first and second races, defining bearing openings. The bearing elements (34) are disposed in the openings. McKee also discloses the sealing surface (68) to be an outer peripheral surface of the ring.

6. With respect to claim 14, McKee discloses a stationary housing (48) having a sealing surface, a rotor assembly (12), a ring (56) having a sealing surface (68) sealing along a portion of

Art Unit: 3676

the housing sealing surface and spaced from the rotor, having a bearing race engagement surface (72) separate from the ring sealing surface. McKee also discloses a first bearing race (16) engaging a portion of the rotor (12), a second bearing race (38 or 40) engaging the race engagement surface, and a bearing cage (36) defining a plurality of bearing openings disposed between the first and second bearing races. A plurality of bearing elements (34) are disposed in the bearing openings.

7. With respect to claims 15 and 16, the housing sealing surface is substantially cylindrical and the ring sealing surface (68) is substantially concentric with the housing sealing surface. McKee also discloses the ring sealing surface (68) to be an outer peripheral surface of the ring.

10. With respect to claim 26, McKee discloses a seal (56) for use adjacent to a rotating race engagement surface (12) and stationary race engagement surface (46). McKee discloses a first race (16) adapted for engagement with the rotating race engagement surface (of 12), the first race (16) defining inner and outer annular portions (axial ends of 16). McKee also discloses a second race (38 or 40) adapted for engagement with the stationary race engagement surface (46) and being disposed between the annular portions of the first race. There is a plurality of bearing elements (34) disposed between the first and second races.

11. With respect to claim 27, McKee discloses a bearing cage (36) disposed between first and second races, defining bearing openings. The bearing elements (34) are disposed in the openings.

Art Unit: 3676

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

13. Claims 12, 24, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over McKee in view of Ide (U.S. Patent No. 5,425,584). McKee discloses the bearings to be balls, not rollers, as claimed.

14. Ide teaches a bearing assembly that uses conventional rolling element bearing components and rolling elements, such as balls or rollers (column 9, lines 24-29), thereby establishing ball bearing and roller bearing as an art recognized equivalent, as either can be used and still allow for proper functioning of the machine they are used in. It would have been obvious to one having ordinary skill in the art at the time of the invention to use either ball or roller bearings in McKee, as taught by Ide, as they are equivalent in the art.

Allowable Subject Matter

15. Claims 4-6, 13, 17-19, 25, and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

16. Claims 35-39, 9-11, 22, 23, and 32-33 are allowed.

Response to Arguments

Art Unit: 3676

17. Applicant's arguments with respect to all rejected claims have been considered but are moot in view of the new ground(s) of rejection. Claims 1-3, 14-16, 26, and 27 are now rejected by McKee. Claims 12, 24, and 34, are rejected by the combination of McKee and Ide.

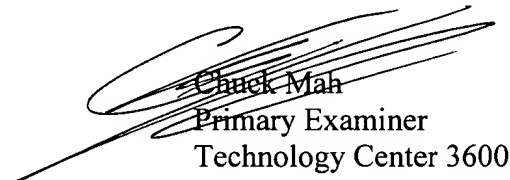
Conclusion

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J Kyle whose telephone number is 703-305-3614. The examiner can normally be reached on Monday - Friday, 8:30 am - 5:00 pm.

19. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Shackelford can be reached on 703-308-2978. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

20. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mk


Chuck Mah
Primary Examiner
Technology Center 3600